We Claim:

1. A Neisserial bleb preparation derived from a neisserial strain with an L2 LOS immunotype or a neisserial strain with an L3 LOS immunotype and wherein the strain is lgtB$^-$; or a Neisserial bleb preparation comprising a combination of blebs derived from a neisserial strain with an L2 LOS immunotype and a neisserial strain with an L3 LOS immunotype, optionally wherein each strain is lgtB$^-$.

2. The Neisserial bleb preparation of claim 1, wherein the neisserial strain(s) are meningococcal, preferably serogroup B.

3. The Neisserial bleb preparation of claim 1 or 2, wherein the neisserial strain(s) cannot synthesise capsular polysaccharide.

4. The Neisserial bleb preparation of claim 3, wherein the neisserial strain(s) have one of the following capsular polysaccharide genes downregulated in expression, and preferably deleted, compared to the native strain(s) from which they are derived: ctrA, ctrB, ctrC, ctrD, synA, synB, synC, or, preferably, siaD; and wherein where L2 and L3 blebs are both present, the strains from which they are derived preferably have the same capsular polysaccharide gene downregulated in expression in each strain.

5. The Neisserial bleb preparation of claims 1-4, wherein the neisserial strain(s) have either or both of the following lipid A genes downregulated in expression, and preferably deleted, compared to the native strain(s) from which they are derived: msbB or htrB, preferably the former; and wherein where L2 and L3 blebs are both present; the strains from which they are derived preferably have the same lipid A gene(s) downregulated in expression in each strain.

6. The Neisserial bleb preparation of claims 1-5, wherein the neisserial strain(s) have 1 or more of the following outer membrane protein genes downregulated in expression, and preferably deleted, compared to the native strain(s) from which they

are derived: porA, porB, opA, opC, pilC or frpB; and wherein where L2 and L3 blebs are both present, the strains from which they are derived preferably have the same outer membrane protein gene(s) downregulated in expression in each strain.

7. The Neisserial bleb preparation of claim 6, wherein the neisserial strain(s) have any of the following combinations of outer membrane protein genes downregulated in expression, and preferably deleted, compared to the native strain(s) from which they are derived: PorA and OpA, PorA and OpC, OpA and OpC, PorA and OpA and OpC, PorA and FrpB, OpC and FrpB, OpA and FrpB, PorA and OpA and OpC and FrpB.

8. The Neisserial bleb preparation of claims 1-7, wherein the neisserial strain(s) have 1 or more of the following outer membrane protein antigens upregulated in expression: NspA, TbpA low, TbpA high, Hsf, Hap, OMP85, PilQ, NadA, LbpA, MltA; and wherein where L2 and L3 blebs are both present, the strains from which they are derived preferably have one or more different outer membrane protein antigens upregulated in expression in each strain.

9. A Neisserial bleb preparation derived from a neisserial strain which has had 2 or more of the following outer membrane proteins downregulated in expression, and preferably deleted, compared to the native strain from which it is derived: PorA, PorB, OpA, OpC, PilC, or FrpB.

10. The Neisserial bleb preparation of claim 9, wherein the neisserial strain has had any of the following combinations of outer membrane proteins downregulated in expression, and preferably deleted, compared to the native strain from which it is derived: PorA and OpA, PorA and OpC, OpA and OpC, PorA and OpA and OpC, PorA and FrpB, OpC and FrpB, OpA and FrpB, PorA and OpA and OpC and FrpB.

11. The Neisserial strain(s) from which the Neisserial bleb preparations of claims 1-10 are derived.

12. A LOS preparation isolated from the Neisserial strain(s) of claim 11 comprising immunotype L2 and/or L3 LOS.

13. The LOS preparation of claim 12 in a liposome formulation.

14. The Neisserial bleb preparation of any one of claims 1-10 or the LOS preparation of claim 12 or 13, wherein the LOS contained therein is conjugated to a source of T-helper epitopes, preferably a protein or outer membrane protein.

15. The Neisserial bleb preparation of claim 14 which is obtainable through a process of intra-bleb cross-linking.

16. An immunogenic composition or vaccine comprising the Neisserial bleb preparation or the LOS preparation of any one of claims 1-10 or 12-15, and a pharmaceutically acceptable excipient.

17. The vaccine of claim 16, additionally comprising an adjuvant, preferably aluminium hydroxide, or 3D-MPL and aluminium phosphate.

18. The vaccine of claim 16 or 17 additionally comprising one or more conjugated capsular polysaccarides or oligosaccharides derived from the following strains: meningococcus serogroup A, meningococcus serogroup C, meningococcus serogroup W-135, meningococcus serogroup Y, and *H. influenzae* type b.

19. A process of manufacturing the Neisserial bleb preparation vaccine of claim 16 comprising the steps of culturing the Neisserial strain(s) of claim 11, isolating blebs therefrom, optionally combining L2 and L3 blebs if appropriate, and formulating the blebs with a pharmaceutically acceptable excipient.

20. The process of claim 19, wherein the isolation step is carried out by extracting with 0-0.5, 0.02-0.4, 0.04-0.3, 0.06-0.2, or 0.08-0.15 % deoxycholate, preferably with around or exactly 0.1% deoxycholate.

21. A bleb preparation from a Gram-negative bacterial strain in the outer-membrane of which is integrated an outer-membrane protein conjugated to LOS.

22. The bleb preparation of claim 21, wherein more than 10, 20, 30, 40, 50, 60, 70, 80, 90, 95 or 99% of the conjugated LOS has its lipid A moiety integrated in the outer-membrane of the bleb and/or in an environment whereby its toxicity is reduced or shielded from a host to which it has been administered.

23. The bleb preparation of claim 21 or 22, wherein the toxicity of the LOS in the bleb is reduced compared to the blebs with the same amount of unconjugated LOS.

24. The bleb preparation of claims 21-23, wherein more than 10, 20, 30, 40, 50, 60, 70, 80, 90, 95 or 99% of the conjugated LOS is in a native conformation suitable for inducing a bactericidal antibody response against it when administered to a host's immune system.

25. The bleb preparation of claims 21-24, wherein the conjugated LOS has a conformation suitable for eliciting an immune response in a host reactive against unconjugated LOS.

26. The bleb preparation of claims 21-25, wherein the outer-membrane protein is conjugated to the oligosaccharide or polysaccharide moiety of the LOS molecule.

27. The bleb preparation of claim 21-26, wherein the outer-membrane protein and LOS molecule are native to the Gram-negative bacterial strain from which the blebs are derived.

28. The bleb preparation of claims 21-27 obtainable by a process of intra-bleb cross-linking.

29. The bleb preparation of claims 21-28 wherein more than 10, 20, 30, 40, 50, 60, 70, 80, 90, or 95% of the LOS present in the blebs is cross-linked or conjugated to outer membrane protein.

30. The bleb preparation of claims 21-29 derived from a Gram-negative strain that does not produce capsular polysaccharide, or from a bleb preparation that does not comprise capsular polysaccharide.

31. The bleb preparation of claims 21-30, wherein capsular polysaccharide is not conjugated to a outer-membrane protein integrated in the bleb preparation.

32. The bleb preparation of claims 21-31 derived from a *Moraxella catarrhalis* or a non-typeable *Haemophilus influenzae* strain.

33. The bleb preparation of claims 21-31 derived from a Neisserial strain, preferably *Neisseria meningitis*.

34. The bleb preparation of claim 33, wherein the bleb preparation comprises conjugated L2 LOS, conjugated L3 LOS, or a mixture of conjugated L2 and L3 LOS preferably separately conjugated to at least 2 different blebs.

35. The bleb preparation of claim 33 or 34 derived from lgtB$^-$ strains, or wherein the LOS has a truncated structure consistent with it having been derived from a strain which is lgtB$^-$.

36. The bleb preparation of claims 32-35, derived from htrB$^-$ and/or msbB$^-$ strains, or wherein the LOS Lipid A moiety lacks secondary acyl chains consistent with it having been isolated from a htrB$^-$ and/or msbB$^-$ meningococcal strain.

37. An immunogenic composition or vaccine comprising the bleb preparation of claims 21-36, and a pharmaceutically acceptable excipient.

38. The immunogenic composition or vaccine of claim 37 additionally comprising an adjuvant, preferably aluminium hydroxide, or 3D-MPL and aluminium phosphate.

39. The immunogenic composition or vaccine of claim 37 or 38 additionally comprising one or more conjugated capsular polysaccarides or oligosaccharides derived from the following strains: meningococcus serogroup A, meningococcus serogroup C, meningococcus serogroup W-135, meningococcus serogroup Y, and *H. influenzae* type b.

40. A process of producing an intra-bleb conjugated bleb preparation from a Gram-negative bacterial strain in the outer-membrane of which is integrated an outer-membrane protein conjugated to LOS, comprising the steps of:

a) isolating blebs from the Gram-negative strain,

b) carrying out chemistry suitable for conjugating the oligosaccharide moiety of the LOS present in the blebs to a outer membrane protein present on the same bleb,

c) isolating the intra-bleb conjugated bleb preparation, and

d) optionally formulating the intra-bleb conjugated bleb preparation with a further intra-bleb conjugated bleb preparation made by the same process but having a different LOS immunotype and/or formulating the bleb preparation with a pharmaceutically acceptable excipient to make a vaccine composition.

41. The process of claim 40 wherein in step a) the blebs are extracted using a low concentration of deoxycholate such as 0-0.3%, preferably around or exactly 0.1%.

42. The process of claim 40 or 41, wherein in step b) the pH is kept between 7 and 9, preferably around pH 7.5.

43. The process of claims 40-42, wherein step b) is carried out in 1-5% sucrose, preferably around 3%.

44. The process of claims 40-43, wherein step b) is carried out in low NaCl concentration conditions.

45. The process of claims 40-44, wherein step b) is carried out with EDAC/NHS chemistry.

46. The process of claims 40-45, wherein in step a) the blebs are isolated from a neisserial strain, preferably a meningococcal strain, most preferably a meningococcus B strain.

47. The process of claim 46 wherein the strain cannot make capsular polysaccharide, and is preferably a siaD$^-$ mutant.

48. The process of claim 46 or 47 wherein the strain is an lgtB$^-$ mutant.

49. The process of claims 46-48 wherein the strain is msbB$^-$ and/or htrB$^-$.

50. The process of claims 46-49 wherein the strain has an L2 LOS immunotype.

51. The process of claims 46-50 wherein the strain has an L3 LOS immunotype.

52. The process of claims 46-51 wherein in step d) a meningococcal intra-bleb conjugated bleb preparation with an L2 immunotype made by the process of claim 50 is combined with a further meningococcal intra-bleb conjugated bleb preparation with an L3 immunotype made by the process of claim 51.